In re: Das et al.

Serial No.: 10/045,542 Filed: October 26, 2001

Page 6 of 7

#### REMARKS

Applicants provide the present Supplemental Amendment to clarify statements made in Applicants' previous Amendments regarding the Xu reference. Amendments to the claims are with respect to the claims as amended in Applicants' previous response. Applicants have amended Claim 1 to incorporate the recitations of Claim 2 and have, accordingly, cancelled Claim 2. Applicants have amended Claims 8, 17 and 20 to recite that the silicon carbide is 4H polytpe.

### The IDS

Applicants wish to bring to the Examiner's attention Information Disclosure Statements filed concurrently herewith that includes the International Preliminary Examination Report (IPER) in the corresponding PCT application..

# The Statements Regarding Xu

In Applicants' previous responses, the undersigned indicated that Xu did not disclose or suggest a hydrogen anneal of a nitrided oxide layer. Upon further consideration of Xu, the undersigned wishes to bring to the attention of the Examiner the statement in Xu that formation of the gate electrodes was "followed by a forming gas anneal at 410 °C for 30 min." Xu, Section II, Experiments. The undersigned now understands that the reference to a forming gas would refer to a gas containing hydrogen. Thus, contrary to the undersigned's previous understanding, Xu could be interpreted to describe annealing a nitrided oxide in a hydrogen environment.

The undersigned had previously focused on the discussion of Xu regarding processing before formation of the gate electrodes and only appreciated the discussion of an anneal in a forming gas upon a detailed review of the IPER in the corresponding PCT application. The undersigned had previously only reviewed the IPER with regard to assuring that the cited references were submitted in the present application. It was not until the IPER was cited in a corresponding national stage application that the undersigned reviewed the IPER in detail and appreciated that the referenced forming gas would contain hydrogen. Applicants apologize for any misunderstanding in light of the undersigned's failure to appreciate the significance of the above recitations in Xu.

In re: Das et al.

Serial No.: 10/045,542 Filed: October 26, 2001

Page 7 of 7

## **The Amended Claims**

Applicants have amended Claims 1, 8, 17 and 20 to recite that the silicon carbide is 4H polytype. In contrast, Xu describes work with 6H polytype silicon carbide. Applicants submit that what may work with 6H silicon carbide may not be effective with 4H silicon carbide because the invention is directed to the interface between the oxide and the underlying silicon carbide. As such, Applicants submit that Xu's work with 6H silicon carbide would not necessarily suggest that such work would be effective with 4H silicon carbide.

### **CONCLUSION**

Applicants submit that the present application is in condition for allowance, which action is respectfully requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (919) 854-1400.

It is not believed that an extension of time and/or additional fee(s)-including fees for net addition of claims-are required, beyond those that may otherwise be provided for in documents accompanying this paper. In the event, however, that an extension of time is necessary to allow consideration of this paper, such an extension is hereby petitioned under 37 C.F.R. §1.136(a). Any additional fees believed to be due in connection with this paper may be charged to our Deposit Account No. 50-0220.

Respectfully submitted

Timothy 5. O'Sullivan Registration No. 35,632

**Customer Number: 20792** 

#### **CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on July 27, 2004.

Traci A. Brown Date of Signature: July 27, 2004